

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To:
RUTAN & TUCKER, LLP
611 ANTON BLVD., 14TH FLOOR
COSTA MESA, CA 92626

PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT OR THE DECLARATION

(PCT Rule 44.1)

Date of Mailing
(day/month/year)

19 DEC 2002

Applicant's or agent's file reference
595.0033PCT

FOR FURTHER ACTION See paragraphs 1 and 4 below

International application No.
PCT/US02/26276

International filing date
(day/month/year)

15 August 2002 (15.08.2002)

Applicant
HONEYWELL INTERNATIONAL INC.

response due: 2/19/03

1. ☐ The applicant is hereby notified that the international search report has been established and is transmitted herewith.

Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.

Where? Directly to the International Bureau of WIPO, 34, chemin des Colombettes
1211 Geneva 20, Switzerland, Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.

☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. Reminders

Shortly after 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90 bis.1 and 90 bis.3, respectively, before the completion of the technical preparations for international publication.

Within 19 months from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later); otherwise the applicant must, within 20 months from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of 30 months (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the ISA/US
Commissioner for Patents
Box PCT
Washington, D.C. 20231
Facsimile No. (703) 305 2320

Authorized officer

Jeffrey B. Robertson
Jeffrey B. Robertson

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(511) 272-1700

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 595.0033PCT	FOR FURTHER ACTION	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. PCT/US02/26276	International filing date (<i>day/month/year</i>) 15 August 2002 (15.08.2002)	(Earliest) Priority Date (<i>day/month/year</i>)
Applicant HONEYWELL INTERNATIONAL INC.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the Report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐

the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐

contained in the international application in written form.

☐

filed together with the international application in computer readable form.

☐

furnished subsequently to this Authority in written form.

☐

furnished subsequently to this Authority in computer readable form.

☐

the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐

the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (See Box II).

4. With regard to the title,

☒

the text is approved as submitted by the applicant.

☐

the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☐

the text is approved as submitted by the applicant.

☒

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No. 4B

☒

as suggested by the applicant.

☐

because the applicant failed to suggest a figure.

☐

because this figure better characterizes the invention.

☐

None of the figures

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/26276

Box III TEXT OF THE ABSTRACT (Continuation of Item 5 of the first sheet)

The abstract is too long (PCT Rule 8.1(b)). The abstract must be less than 150 words, or 200 words when no figure is to be published.

NEW ABSTRACT

Low dielectric materials are described herein that comprise a plurality of pores or nanopores in addition to the ultrananopores. It is further contemplated that the low dielectric materials described herein will have a dielectric constant of less than about 3. The dielectric materials are formed from polymer compositions, wherein the polymer compositions comprise a plurality of monomers and wherein at least one monomer comprises a radical precursor bonded to a structural precursor. Further, methods of forming dielectric materials from polymer compositions are presented. The figure shows the chemical structure for a methyl/t-butyl Low Organic Content/Low Organic Siloxane Polymer.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/26276

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H01B 3/02, 3/30, 3/46; B32B 3/26; C08G 65/00, 77/04

US CL : 252/570,573; 428/304.4,312.6,447; 521/154,180; 525/390,416,474,534

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 252/570,573; 428/304.4,312.6,447; 521/154,180; 525/390,416,474,534

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,P	US 6,472,076 B1 (HACKER) 29 October 2002 (29.10.2002), column 2, lines 15-25, column 11, lines 1-67, column 12, lines 37-67, column 14, lines 20-40.	1, 3-6, 7, 9, 11, 15-19, 28, 32, 33, 35-38, 40
X	US 6,107,357 A (HAWKER et al) 22 August 2000 (22.08.2000), column 4, line 64 through column 5, line 33, column 5, line 53 through column 6, line 56, column 8, lines 1-24, column 10, lines 6-63, column 11, lines 27-60.	1-9, 11-21, 23, 24, 26-40
X	US 6,143,360 A (ZHONG) 07 November 2000 (07.11.2000), column 3, lines 30-66, column 6, lines 39-67.	1-7, 9, 11-21, 23, 24, 26-38, 40
X	US 6,156,812 A (LAU et al) 05 December 2000 (05.12.2000), column 3, lines 13-52, column 7, line 53 through column 8, line 56, column 11, lines 55-67, column 12, lines 23-51.	1-3, 14, 16-21, 23, 24, 26-32, 38
A	US 6,177,143 B1 (TREADWELL et al) 23 January 2001 (23.01.2001), column 2, lines 19-62.	1-41
A	US 6,235,353 B1 (DRAGE et al) 22 May 2001 (22.05.2001), column 2, lines 38-55.	1-41

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

20 November 2002 (20.11.2002)

Date of mailing of the international search report

19 DEC 2002

Name and mailing address of the ISA/US

Commissioner of Patents and Trademarks
Box PCT
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INTERNATIONAL SEARCH REPORT

PCT/US02/26276

Continuation of B. FIELDS SEARCHED Item 3:

EAST search, search terms: ultrananopore, ultrananoporous, dielectric material, dielectric constant, radical precursor, structural precursor, adamantane, pore, nanometer, polysiloxane, organopolysiloxane, polyorganosiloxane, polydiorganosiloxane, diorganopolysiloxane, silicone, siloxane, hydridosiloxane, organohydridosiloxane, silsesquioxane, polysilsesquioxane.